

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/730,248
Atty. Docket No. Q78868

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A developing roller comprising a shaft, an elastic layer formed on the outer periphery of the shaft, and at least one resin outer layer formed on the outer periphery of the elastic layer, wherein

fine particles are dispersed in the resin outer layer;

the resin outer layer contains a conductive agent; and

wherein the content of the conductive agent is in a range of 0.01 to 20 parts by weight relative to 100 parts by weight of the resin; and

wherein the mean particle diameter of the fine particles is in a range of 1 to 50 μm .

2. (canceled).

3. (original): A developing roller as claimed in claim 1, wherein the content of the fine particles is in a range of 0.1 to 100 parts by weight relative to 100 parts by weight of resin.

4. (original): A developing roller as claimed in claim 1, wherein the thickness of the resin outer layer is in a range of 1 to 100 μm .

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/730,248
Atty. Docket No. Q78868

5. (original): A developing roller as claimed in claim 1, wherein the ratio of the mean particle diameter "a" of the fine particles and the thickness "b" of the resin outer layer, i.e. "a/b", is in a range of 0.03 to 0.5.

6. (currently amended): A developing roller comprising a shaft, an elastic layer formed on the outer periphery of the shaft, and at least one resin outer layer formed on the outer periphery of the elastic layer, wherein

fine particles are dispersed in the resin outer layer and provide a surface roughness for the resin outer layer; and

wherein the resin outer layer is made of a ultraviolet-curable resin or an electron-beam-curable resin; and

wherein the mean particle diameter of the fine particles is in a range of 1 to 50 μm .

7. (currently amended): A developing roller comprising a shaft, an elastic layer formed on the outer periphery of the shaft, and at least one resin outer layer formed on the outer periphery of the elastic layer, wherein

fine particles are dispersed in the resin outer layer and provide a surface roughness for the resin outer layer; and

wherein the fine particles are made of a rubber or a synthetic resin; and

wherein the mean particle diameter of the fine particles is in a range of 1 to 50 μm .

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/730,248
Atty. Docket No. Q78868

8. (currently amended): A developing roller as claimed in claim 7, wherein the fine particles are made of at least one of silicone rubber, fluoroplastic, urethane elastomer, urethane acrylate, melamine resin, and phenol resin.

9. (original): A developing roller as claimed in claim 1, wherein the fine particles are glassy carbon fine particles.

10-11. (canceled).

12. (original): A developing roller as claimed in claim 1,
wherein the elastic layer is molded in a mold and the resin outer layer is formed without
grinding the surface of the elastic layer.

13. (original): An image forming device having a developing roller, wherein the
developing roller is the developing roller as claimed in claim 1.

14. (new): A developing roller as claimed in claim 6, wherein the content of the fine
particles is in a range of 0.1 to 100 parts by weight relative to 100 parts by weight of resin.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/730,248
Atty. Docket No. Q78868

15. (new): A developing roller as claimed in claim 6, wherein the thickness of the resin outer layer is in a range of 1 to 100 μm .

16. (new): A developing roller as claimed in claim 6, wherein the ratio of the mean particle diameter "a" of the fine particles and the thickness "b" of the resin outer layer, i.e. "a/b", is in a range of 0.03 to 0.5.

17. (new): A developing roller as claimed in claim 7, wherein the content of the fine particles is in a range of 0.1 to 100 parts by weight relative to 100 parts by weight of resin.

18. (new): A developing roller as claimed in claim 7, wherein the thickness of the resin outer layer is in a range of 1 to 100 μm .

19. (new): A developing roller as claimed in claim 7, wherein the ratio of the mean particle diameter "a" of the fine particles and the thickness "b" of the resin outer layer, i.e. "a/b", is in a range of 0.03 to 0.5.